UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

20873 7590 06/15/2010 Locke Lord Bissell & Liddell LLP Attn: Michael Ritchie, Docketing 2200 Ross Avenue Suite # 2200

DALLAS, TX 75201-6776

EXAMINER				
LEUNG, JENNIFER A				
ART UNIT	PAPER NUMBER			
1797	•			
DATE MAILED: 06/15/20	010			

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/795,972	03/08/2004	Edward W. Jackson	0100778.00004	8602

TITLE OF INVENTION: CONCENTRIC HOPPER AND BURN CHAMBER FOR SULPHUROUS ACID GENERATOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	09/15/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includired below or directed oth	ng the Patent, advance on nerwise in Block 1, by (a	rders and notification of r a) specifying a new corres	naintenance fees w pondence address;	ill be and/o	mailed to the current (b) indicating a sepa	correspondence address as trate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers, Each additional paper, such as an assignment or formal drawing, mus have its own certificate of mailing or transmission.				
20873	7590 06/15	/2010	have			-		
Attn: Michael R 2200 Ross Aven	ssell & Liddell LI itchie, Docketing uc	.P	I he Stat addi tran	Cert reby certify that thi es Postal Service w ressed to the Mail smitted to the USP	ificate s Fee(ith sul Stop FO (57	of Mailing or Trans s) Transmittal is being ficient postage for firs ISSUE FEE address I) 273-2885, on the d	mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.	
Suite # 2200 DALLAS, TX 7	5201-6776						(Depositor's name)	
							(Signature)	
							(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.	
10/795,972	03/08/2004		Edward W. Jackson		(100778.00004	8602	
			BER FOR SULPHUROUS					
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	YES	\$755	\$300	\$0		\$1055	09/15/2010	
EXAM	INER	ART UNIT	CLASS-SUBCLASS					
LEUNG, JE	LEUNG, JENNIFER A 1797 422-160000			="				
1. Change of correspondence address or indication of "Fee Address" (37 CFR L363). Change of correspondence address (or Change of Correspondence Address form PTOSB/122) attached. The Address' indication for "Fee Address" indication form PTOSB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			(I) the names of up to or agents OR, alternative (2) the name of a single registered attorney or a 2 registered patent atto	printing on the patent front page, list annes of up to 3 registered patent attorneys to OR, afternatively, annee of a single firm (having as a member a red attorney or agent) and the names of up to no name will be printing agent. If no anner is no name will be printing agent. If no anner is				
PLEASE NOTE: Uni recordation as set fort (A) NAME OF ASSIG	less an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee pletion of this form is NO	(B) RESIDENCE: (CITY	ntent. If an assigne assignment. and STATE OR C	OUNT	'RY)	ocument has been filed for	
4a. The following fee(s) Issue Fee Publication Fee (N Advance Order	o small entity discount p		b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038	is atta	ched. required fee(s), any de		
	s SMALL ENTITY state	is. See 37 CFR 1.27.	☐ b. Applicant is no lon					
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than t Office.	he applicant; a regi	stered.	attorney or agent; or th	e assignee or other party in	
Authorized Signature				Date				
Typed or printed name				Registration N	o			
This collection of inform an application. Confiden submitting the completes this form and/or suggests Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 d application form to the ons for reducing this but firginia 22313-1450. DC 13-1450.	FR 1.311. The informatis U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th O NOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est r depending upon the indiv e Chief Information Office COMPLETED FORMS TO	retain a benefit by the imated to take 12 n idual case. Any co- er, U.S. Patent and O THIS ADDRESS	ne pub ninute: mment Frader . SEN	tic which is to file (and to complete, including s on the amount of tin nark Office, U.S. Depo D TO: Commissioner	by the USPTO to process) g gathering, preparing, and ne you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



DALLAS, TX 75201-6776

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandra, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/795,972	72 03/08/2004		Edward W. Jackson	0100778.00004	8602		
20873	20873 7590 06/15/2010			EXAMINER			
Locke Lord Bissell & Liddell LLP			LEUNG, JENNIFER A				
Attn: Michael F	Attn: Michael Ritchie, Docketing			ART UNIT	PAPER NUMBER		
	2200 Ross Avenue			1797			
Suite # 2200			DATE MAILED: 06/15/2010				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 488 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 488 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/795 972 JACKSON ET AL. Notice of Allowability Examiner Art Unit JENNIFER A LEUNG 1797 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to the amendment filed on June 4, 2010. The allowed claim(s) is/are 3,4 and 6-19. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

/Jennifer A. Leung/ Primary Examiner, Art Unit 1797 Art Unit: 1797

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Mark R. Backofen on June 10, 2010.

The application has been amended as follows:

IN THE CLAIMS:

2

7. (Currently Amended) The apparatus of claim 6 where the means for substantially eliminating any discharge plume utilizes the radiant heat created by the apparatus to reduces the moisture content of the discharge.

REJOINDER

Claims 3, 4 and 6-15 are allowable. Claims 16-19, which were previously withdrawn from consideration as a result of a restriction requirement, require all the limitations of allowable claim 11. Pursuant to the procedures set forth in MPEP § 821.04(a), the restriction requirement between inventions I and II, as set forth in the Office action mailed on August 6, 2009, is hereby withdrawn and claims 16-19 are hereby rejoined and fully examined for patentability under 37 CFR 1.104. In view of the withdrawal of the restriction requirement, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the

Application/Control Number: 10/795,972

Art Unit: 1797

claims of the instant application.

Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01

REASONS FOR ALLOWANCE

Claims 3, 4, 6-10 and 12-15 are allowable for the same reasons set forth in the Office
 Action mailed on September 15, 2008. Claims 11 is allowable for the same reasons set forth in the Office Action mailed on February 24, 2010.

In addition, claims 16-19 are allowable. The prior art does not disclose or adequately suggest a method for using a sulphurous acid generator wherein, in particular, the sulphurous acid generator specifically comprises the structural features of a combustion chamber for combusting solid sulphur comprising one or more sidewalls, a base, a lid and a gas outlet; a hopper to hold the solid sulphur to be combusted comprising one or more sidewalls, a base and a lid, wherein the hopper substantially surrounds the combustion chamber; a first conduit connected to the gas outlet; and a second conduit comprising a restrictor and conducting a stream of water; wherein the first conduit extends into the restrictor so as to both point and terminate downstream in the restrictor.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

* * *

Art Unit: 1797

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER A. LEUNG whose telephone number is (571) 272-1449. The examiner can normally be reached on 9:30 am - 5:30 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter D. Griffin can be reached on (571) 272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer A. Leung/ Primary Examiner, Art Unit 1797